ABSTRACT

Disclosed herein are hepatitis C viral protease inhibitors of formula (I):

$$\mathbf{B} = \begin{bmatrix} \mathbf{P}_{1} & \mathbf{P}_{2} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{1} \\ \mathbf{P}_{1} & \mathbf{P}_{2} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{3} \\ \mathbf{P}_{2} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{3} \\ \mathbf{R}_{4} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{3} \\ \mathbf{R}_{5} & \mathbf{P}_{4} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{3} \\ \mathbf{R}_{5} & \mathbf{P}_{4} & \mathbf{P}_{3} & \mathbf{P}_{4} & \mathbf{P}_{5} \\ \mathbf{R}_{6} & \mathbf{P}_{5} & \mathbf{P}_{4} & \mathbf{P}_{3} & \mathbf{P}_{2} & \mathbf{P}_{3} \\ \mathbf{R}_{5} & \mathbf{P}_{4} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{R}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{R}_{5} & \mathbf{P}_{5} \\ \mathbf{R}_{5} & \mathbf{P}_{5} \\ \mathbf{R}_{5} & \mathbf{P}_{5} \\ \mathbf{R}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} & \mathbf{P}_{5} \\ \mathbf{P}_{5} &$$

wherein \boldsymbol{a} is 0 or 1; \boldsymbol{b} is 0 or 1; \boldsymbol{Y} is H or $C_{1\text{-}6}$ alkyl;

5 **B** is H, an acyl derivative or a sulfonyl derivative;

 \mathbf{R}_{6} , when present, is C_{1-6} alkyl substituted with carboxyl;

 \mathbf{R}_{5} , when present, is C_{1-6} alkyl optionally substituted with carboxyl;

 $\mathbf{R_4}$ is $C_{1\text{--}10}$ alkyl, $C_{3\text{--}7}$ cycloalkyl or $C_{4\text{--}10}$ (alkylcycloalkyl);

 $\mathbf{R_3}$ is $C_{\text{1-10}}$ alkyl optionally substituted with carboxyl, $C_{\text{3-7}}$ cycloalkyl or $C_{\text{4-10}}$

10 (alkylcycloalkyl);

 R_2 is CH_2 - R_{20} , NH- R_{20} , O- R_{20} or S- R_{20} , wherein R_{20} is a saturated or unsaturated C_{3-7} cycloalkyl or C_{4-10} (alkyl cycloalkyl) being optionally mono-, di- or tri-substituted with R_{21} , or R_{20} is a C_6 or C_{10} aryl, C_{7-16} aralkyl, Het or (lower alkyl)-Het, all optionally mono-, di- or tri-substituted with R_{21} , wherein R_{21} is as defined herein;

 R_1 is $C_{1.6}$ alkyl, $C_{2.6}$ alkenyl or $C_{2.6}$ alkynyl, all optionally substituted with halogen; and

W is hydroxy or a N-substituted amino; or **W** taken together with the carbonyl group to which it is bonded represents an ester group, or a pharmaceutically acceptable salt thereof.